BTEC Assignment Brief

Qualification	Pearson BTEC International Level 3 Extended Diploma in Aeronautical Engineering Pearson BTEC International Level 3 Diploma in Aeronautical Engineering
Unit number and title	**Unit 50: Aircraft Gas Turbine Engines**
Learning aim	**B:** Examine the function and operation of gas turbine engine components and systems that produce thrust
Assignment title	Gas Turbine Lubrication and Air Systems
Assessor	
Issue date	
Hand in deadline	

Vocational Scenario or Context	You are an apprentice aeronautical engineer and the senior engines specialist where you work has asked you to write a report that demonstrates your understanding of the important systems that ensure the continued operation of gas turbine engines.

Task 1	You are to produce an accurate technical report that evaluates the function and operation of from the following components • Intake • Compressor • Combustor • Turbine • Exhaust Your report must compare the different designs of the components above and the effects that these differences have on overall gas turbine engine performance. The document should cover: • An evaluation of the function and operation of gas turbine engine components and engine starting and fluid systems • Comparisons between component and system types. Your final report will be read by the Training Manager who is not a gas turbine engine specialist. Hence you will need to ensure that the report is easy to read, well-structured and uses the correct technical terminology and any applicable engineering mathematical notations.
Checklist of evidence required	Technical report using appropriate technical terminology Diagrams / graphical representations as appropriate Harvard References as appropriate

Criteria covered by this task:	
Unit/Criteria reference	To achieve the criteria you must show that you are able to:
50/B.D2	Evaluate the function and operation of gas turbine engine components and engine starting and fluid systems, making comparisons between component and system types
50/B.M3	Analyse the function and operation of gas turbine engine components and engine starter and fluid systems, making comparison between component types
50/B.P3	Explain the function and operation of gas turbine engine components
50/B.P4	Explain the function and operation of gas turbine starter and fluid systems